

**Patent Abstracts of Japan**

PUBLICATION NUMBER : 03122497  
 PUBLICATION DATE : 24-05-91

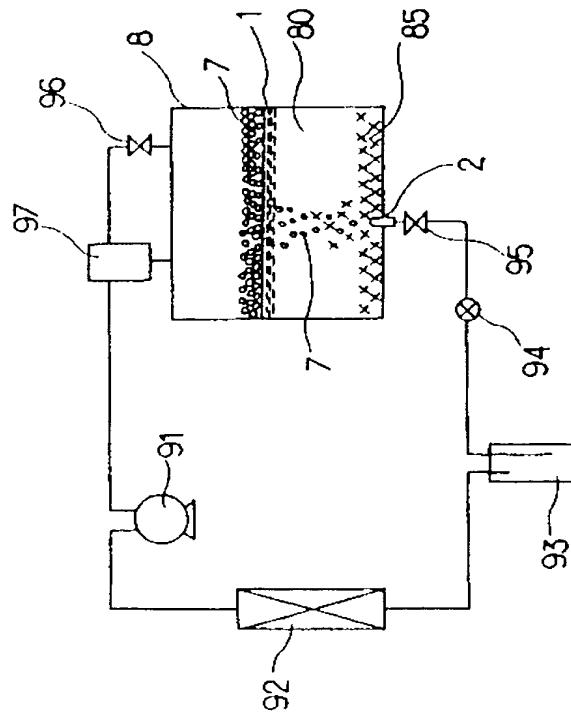
APPLICATION DATE : 03-10-89  
 APPLICATION NUMBER : 01258390

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INT.CL. : F28D 20/00 F25C 1/00

TITLE : COLD ACCUMULATOR



**ABSTRACT :** PURPOSE: To produce, store ice efficiently and improve the efficiency of a cold accumulator by floating granular heat insulating materials at the upper part of cold accumulation agent and at the lower part of the produced ice.

CONSTITUTION: When refrigerant gas of low temp. is blown in the cold accumulation agent 80 in a cold accumulation vessel 8, the water in the agent becomes ice to form liquid ice. At the same time, the refrigerant and water react each other to form gas hydrate 85. As the ice 7 is lighter than the agent 80, the ice floats at the upper part and floats on granular heat insulating materials which are heavier than the ice and is accumulated. On the other hand, the hydrate 85 is heavier than the agent 80 and the hydrate is, therefore, accumulated at the lower part to decrease the temp. of the agent 80. Thereby, the floated ice is not dissolved by the cold regenerative agent. The gas hydrate also acts in the direction to cool the cold regenerative agent particularly at the first stage. Accordingly, ice can be produced and stored efficiently and the efficiency of a cold regenerator can be improved.

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